

4. FEATURES


M335

- Conformally Coated Microprocessor
- Plays CD-R & CD-RWs
- Z-Enhancer
- Rotary Volume Control
- Input for Marine Wired Remote Control
- White Positive LCD with White Buttons
- Detachable Faceplate
- 2 Channel RCA Line Level Output
- 200 Watt (50W × 4)
- **MAGI-TUNE**® Tuner with 18 FM/ 6 AM Presets
- Magna Bass EX
- Screen Saver
- Aluminum Face Plate

M235

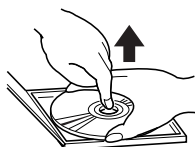
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5. HANDLING COMPACT DISCS

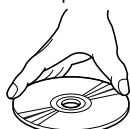
This unit has been designed specifically for playback of compact discs bearing the  mark. No other discs can be played.

To remove the compact disc from its storage case, press down on the center of the case and lift the disc out, holding it carefully by the edges.

Removing the disc

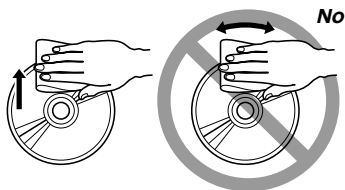


Proper way to hold the compact disc

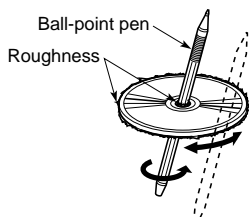


Always handle the compact disc by the edges. Never touch the surface.

To remove fingerprints and dust, use a soft cloth, and wipe in a straight line from the center of the compact disc to the circumference.

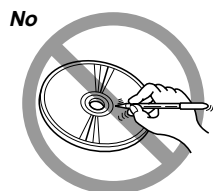


New discs may have some roughness around the edges. The unit may not work or the sound may skip if such discs are used. Use a ball-point pen, etc. to remove roughness from the edge of the disc.

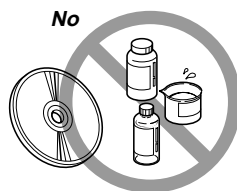


Note on Compact Discs

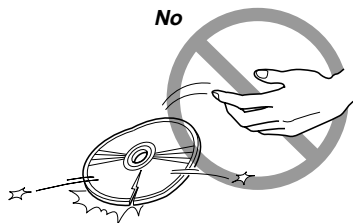
Never stick labels on the surface of the compact disc or mark the surface with a pencil or pen.



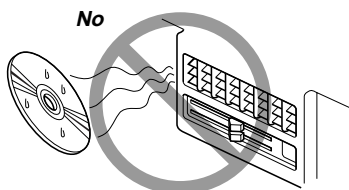
Do not use any solvents such as commercially available cleaners, anti-static spray, or thinner to clean compact discs.



Do not use compact discs that have large scratches, are misshapen, or cracked, etc. Use of such discs will cause misoperation or damage.



Do not expose compact discs to direct sunlight or any heat source.



Note:

- Do not use commercially available CD protection sheets or discs equipped with stabilizers, etc. These may get caught in the internal mechanism and damage the disc.

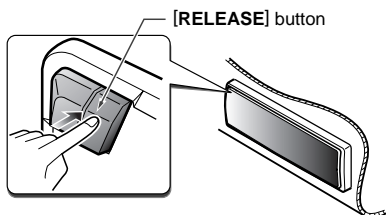
6. DCP (Detachable Control Panel)

The control panel can be detached to prevent theft. When detaching the control panel, store it in the DCP (DETACHABLE CONTROL PANEL) case to prevent scratches.

We recommend taking the DCP with you when leaving the boat.

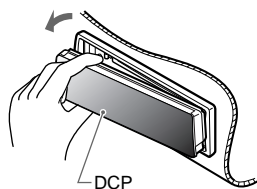
Removing the DCP

1. Press the **[FNC]** button for 1 second or longer to switch off the power.
2. Press in the **[RELEASE]** button.



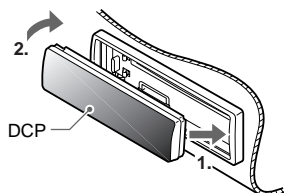
* The DCP is unlocked

3. Remove the DCP.



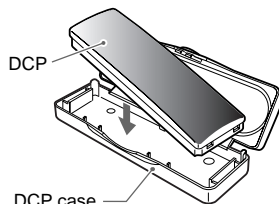
Attaching the DCP

1. Insert the right side of the DCP into the main unit.
2. Insert the left side of the DCP into the main unit.



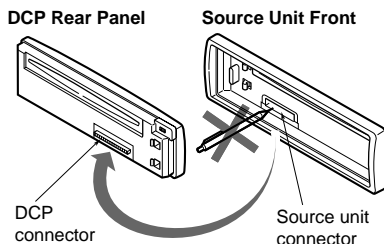
Storing the DCP in the DCP Case

Hold the DCP, in the orientation as shown in the figure below, and put it into the supplied DCP case. (Ensure the DCP is in the correct orientation.)



⚠ CAUTION

- The DCP can easily be damaged by shocks. After removing it, place it in a protective case and be careful not to drop it or subject it to strong shocks.
- When the release button is pressed and the DCP is unlocked, the boat's vibrations may cause it to fall. To prevent damage to the DCP, always store it in a protective case after detaching it.
- The rear connector that connects the source unit and the DCP is an extremely important part. Be careful not to damage it by pressing on it with fingernails, pens, screwdrivers, etc.



Note:

- If the DCP is dirty, wipe off with a soft, dry cloth only.

7. OPERATION

Note:

- Be sure to read this chapter referring to the front diagrams of chapter 2. **CONTROLS** on page 3 (unfold).

Basic Operations

⚠ CAUTION

When this unit is turned on, starting and stopping the engine of a boat with its volume raised to the maximum level may harm your hearing. Be careful about adjusting the volume.

Turning ON the Power and Adjusting the Volume

- 1) Press the **[FNC]** button.
* To turn off the power, press the **[FNC]** button for 1 second or longer.
- 2) Press the **[FNC]** button and select another operation mode. Every time the **[FNC]** button is pressed, the display changes the operation mode as:
Radio → CD → Radio.....

Notes:

- The operation mode not connected to the unit will not be selected.
 - If the CD mode is selected when no disc is inserted, the display show "no DISC".
- 3) Turning the **[ROTARY]** knob clockwise increases the volume; turning it counterclockwise decreases the volume.
* The volume level is from 0 (minimum) to 33 (maximum).

Audio Mode Adjustments

Press the **[A-M]** button to select the adjustment mode. The mode switches as follows each time the **[A-M]** button is pressed:

BASS → TREB → BAL → FAD → Previous mode

MAGNA BASS EX on and off

- 1) Press and hold the **[A-M]** button for 2 seconds or longer, then the Bass will extra boost.

Note:

- MAGNA BASS EX effect depend on volume level.

Adjusting the Bass

- 1) Press **[A-M]** button and select "BASS".
- 2) Turning the **[ROTARY]** knob clockwise emphasizes the bass; turning it counterclockwise attenuates the bass.
* The factory default setting is "0". (Adjustment range: -7 to +7)
- 3) When the adjustment is complete, press **[A-M]** button several times until the function mode is reached.

Adjusting the Treble

- 1) Press **[A-M]** button and select "TREB".
- 2) Turning the **[ROTARY]** knob clockwise emphasizes the treble; turning it counterclockwise attenuates the treble.
* The factory default setting is "0". (Adjustment range: -7 to +7)
- 3) When the adjustment is complete, press **[A-M]** button several times until the function mode is reached.

Adjusting the Balance

- 1) Press **[A-M]** button and select "BAL".
- 2) Turning the **[ROTARY]** knob clockwise emphasizes the sound from the right speaker; turning it counterclockwise emphasizes the sound from the left speaker.
* The factory default setting is "0". (Adjustment range: L13 to R13)
- 3) When the adjustment is complete, press **[A-M]** button several times until the function mode is reached.

Adjusting the Fader

- 1) Press **[A-M]** button and select "FAD".
- 2) Turning the **[ROTARY]** knob clockwise emphasizes the sound from the front speakers; turning it counterclockwise emphasizes the sound from the rear speakers.
* The factory default setting is "0". (Adjustment range: F12 to R12)
- 3) When the adjustment is complete, press **[A-M]** button several times until the function mode is reached.

Setting the Z-enhancer

This unit comes with three types of sound tone effects stored in memory. Select the one you prefer.

* The factory default setting is "Z-EHCR OFF".

Each time you press [Z-EHCR] button, the tone effect changes in the following order.

"Z-ENHANCER 1" → "Z-ENHANCER 2" →

"Z-ENHANCER 3" → "Z-EHCR OFF" →

"Z-ENHANCER 1"...

- Z-ENHANCER 1: bass emphasized
- Z-ENHANCER 2: treble emphasized
- Z-ENHANCER 3: bass and treble emphasized
- Z-EHCR OFF: no sound effect

Switching the Clock Display

Press and hold the [BND] button, and then press the [DISP] button to switch between the operation mode and the clock display.

Setting the Clock

- 1) Press and hold the [BND] button, and then press the [DISP] button to display the clock display.
- 2) Press and hold the [BND] button, and then press the [DISP] button for 2 seconds or longer.
- 3) Press the [▶▶] button, then set the current minute.
- 4) Press the [◀◀] button, then set the current hour.
- 5) Press the [BND] button, then the clock is set.

Notes:

- If you select another operation mode while you are setting the clock, the clock setting operation will be canceled.
- If you remove the vehicle's battery for a check or repair, the clock will be reset, so you must set it again.

Screen Saver mode

- 1) Press and hold the [BND] button, and then press the [SS] button to switch on, and off Screen saver mode
- * The factory default setting is "SS On".

Radio Mode Operations

FM Reception

For enhanced FM performance the **MAGI-TUNE®** tuner includes signal actuated stereo control and Multipath noise reduction circuits.

Listening to the Radio

- 1) Press the [FNC] button to select the radio mode, then the radio will be on.
- 2) To select a preset band, press the [BND] button, then select one of the preset bands such as FM1, FM2, FM3, or AM. Every time the [BND] button is pressed, the display will change as:
FM1 → FM2 → FM3 → AM → FM1
- 3) Press the [◀◀][▶▶] button, then the station at which there is a broadcast will be selected (Seek selection).

Manual Tuning

- 1) Press the [BND] button, then select FM1, FM2, FM3 or AM.
- 2) Press and hold the [BND] button for 1 second or longer, then the display will show "MANU", which means that a manual selection function is on.
- 3) Press the [◀◀][▶▶] button and select the right station.

Seek Tuning

- 1) Press the [BND] button, then select FM1, FM2, FM3 or AM.
- 2) If the "MANU" on the display is on, press and hold the [BND] button for 1 second or longer. When the "MANU" display is off, the seek selection function is on.
- 3) Press the [◀◀][▶▶] button, then when it selects the station in which there is a broadcast, it automatically stops.

Preset Memory Function

Preset Memory Function can store up to 24 stations: six stations for each of FM1, FM2, FM3 and AM.

Note:

- When the preset memory function is used, all the content of the memory will be erased.

Manual memory function

- 1) Press the **[BND]** button, and select the band you want to store in the memory.
- 2) Press the **[◀|▶]** button then select the station you want to store in the memory.
- 3) Press and hold the **[DIRECT]** button for 2 seconds or longer, then the station will be stored in the memory.

Auto store function (Automatic Station Store)

- 1) Press the **[BND]** button, then select the band you want to store in the memory.
- 2) Press and hold the **[PS/AS]** button for 2 seconds or longer, then the station at which the reception is the strongest will be automatically stored in the memory.

Note:

- When the number of stations stored is less than six, the previous content of the memory for each direct button will be retained.

Preset Scanning (Preset Station Scan)

When the **[PS/AS]** button is pressed, the “**SCN**” will indicated preset memory numbers and the stations are tuned in for 7 seconds each in the order in which they were stored. Press the **[PS/AS]** button again to cancel the preset scanning mode.

Instant Station Recall (ISR)

With this function, a specific radio station can be recalled from any mode.

ISR memory

- 1) Press the **[FNC]** button, then select the radio mode.
- 2) Select the radio station which you want to store in the memory.
- 3) Press and hold the **[ISR]** button for 2 seconds or longer.

Recalling ISR

Press the **[ISR]** button then the display will show “**ISR**”, then the radio station previously memorized will be selected. Press the **[ISR]** button again to disengage the unit from the Recalling ISR function.

Area Change

Use this function when you are using the boat stereo anywhere outside the U.S.

Switchable frequency spacing

This boat stereo is initially set to tune in frequency intervals of 10 kHz for AM and 200 kHz for FM, the standard calibrations in the U.S. When using the unit outside the U.S., use the following procedure to switch the frequency range. The table below lists the frequency specifications for the U.S. and other countries.

		Initial Setting (U.S. standard)	New Setting (Australia standard)	New Setting (Europe standard)
AM	Frequency spacing	10 kHz	9 kHz	9 kHz
	Frequency range	530 to 1,710 kHz	531 to 1,602 kHz	531 to 1,602 kHz
FM	Frequency spacing	200 kHz	50 kHz	50 kHz
	Frequency range	87.9 to 107.9 MHz	87.0 to 108 MHz	87.5 to 108 MHz

Switching the area change

Australia standard (New Setting)

While pressing the **[A-M]** button, press the **[RPT]** button, then “Australia standard” will be selected.

Inside U.S. standard (Initial Setting)

While pressing the **[A-M]** button, press the **[SCN]** button, then the “U.S. standard” will be selected.

Europe standard (New Setting)

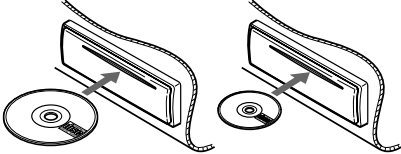
While pressing the **[A-M]** button, press the **[RDM]** button, then “Europe standard.” will be selected.

CD Mode Operations

Loading a Disc

Insert the disc into the CD insertion slot with its label side up, then the CD will start playing.

For 5-inch (12 cm) CD For 3-inch (8 cm) single CD



- * When inserting a single CD (3" (8 cm)), insert it from the center of the slot.
- * When inserting a single CD (3" (8 cm)), do not connect an adapter.

Notes:

- Some CDs recorded in CD-R/CD-RW mode may not be usable.

Listening to the Disc already Inserted

Press the [FNC] button to select the CD mode, the CD will start playing.

Stopping (pausing) Playback

Press the [▶/II] button.

Press the [▶/II] button again to resume playback.

Ejecting the CD

Press the [▲] button, then the CD will be ejected.

Note:

- If the ejected CD is left as it is, it will be reloaded after 15 seconds. However, single CDs will not be reloaded, so make sure to remove them.

Top Function

Press the [BND] button, then the CD will start playing from the first song (track number 1).

Selecting Tracks (songs)

Press the [◀][▶] button.

- ▶▶: Playback will start from the next track.
- ◀◀: Playback will start from the beginning of the track currently playing. When this button is pressed again, the CD will play from the previous track.

Fast-Forward and Fast-Backward

Press and hold the [◀][▶] button.

- ▶▶: To fast-forward
- ◀◀: To fast-backward

- * Pressing the [◀][▶] button for 1 second or longer will move forward or backward 3 times faster than normal play, and pressing it for 3 seconds or longer will do the operation 30 times faster.

Scan Play (Intro Music Scan)

Press the [SCN] button, then the display shows "SCN", then the CD will play the first 10 seconds of each track of the whole disc. Press the [SCN] button again to disengage the unit from scan play.

- * A scan play will start from the track following the one currently playing.

Repeat Play

Press the [RPT] button, then the display shows "RPT", then the track currently playing will be played repeatedly. Press the [RPT] button again to disengage the unit from repeat play.

Random Play

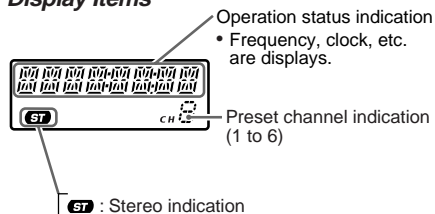
Press the [RDM] button, then the display will show "RDM", then the entire tracks on the disc will be played at random. Press the [RDM] button again to disengage the unit from random play.

8. WIRED REMOTE CONTROL UNIT OPERATIONS (M335 only)

Note:

- Be sure to read this chapter referring to the front diagrams of chapter 2. **CONTROLS** on page 3 (unfold).
- M335 following operations are enabled by remote control with the Wired Remote Control Unit M202RC (sold separately).

Display Items



⚠ CAUTION

Be careful about adjusting the volume, as turning on the power while the volume is raised to its maximum may harm your hearing.

[SOURCE] Button

Turning on and off the power

Press the [SOURCE] button to turn the power on and press and hold it for 1 second or longer to turn the power off.

Changing the operation mode

Each time the [SOURCE] button is pressed, the mode switches in the following order:

Radio mode → CD mode → Radio mode.....

Notes:

- If the above equipment is not connected, corresponding mode cannot be selected.
- In CD mode, if no CD is loaded in M335, "no DISC" shows on the Display and the radio mode is selected.

[▲], [▼] Buttons

Adjusting the volume

Press the [▲] button to increase the volume and press the [▼] button to decrease the volume.

[BAND] Button

Changing the band (in Radio mode)

Each time the [BAND] button is pressed, the band switches in the following order:

FM1 → FM2 → FM3 → AM → FM1.....

Top function (in CD mode)

Press the [BAND] button, then the CD will start from the first song (track number 1).

[MUTE] Button

Press the [MUTE] button. The sound is muted immediately.

To cancel, press the [MUTE] button again. In Radio mode, display will show MUTE. In CD mode, display will show PAUSE.

[▲], [▼] Buttons

Selecting tracks (CD mode)

Press the [▲] button to start playback from the beginning of the following track. Press the [▼] button to start playback from the beginning of the current track. If pressed again, the track moves to the previous one.

Fast-forward and fast-backward (CD mode)

Press and hold the [▲] button to fast-forward the disc. Press and hold the [▼] button to fast-backward the disc.

* Pressing and holding the [▲] or [▼] buttons for 1 second or longer will move forward or backward 3 times faster than normal play, and pressing and holding it for 3 seconds or longer will do the operation 30 times faster.

Changing preset stations (in Radio mode)

Each time the [▲] or [▼] buttons are pressed, the preset station switches in the following order:

1 → 2 → 3 → 4 → 5 → 6 → 1.....

or

6 → 5 → 4 → 3 → 2 → 1 → 6.....

9. TROUBLESHOOTING

Problem	Cause	Solution
Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage. If the fuse blows again, consult your store of purchase.
	Incorrect wiring.	Consult your store of purchase.
Compact disc cannot be loaded.	Another compact disc is already loaded.	Eject the compact disc before loading the new one.
Sound skips or is noisy.	Compact disc is dirty.	Clean the compact disc with a soft cloth.
	Compact disc is heavily scratched or warped.	Replace with a compact disc with no scratches.
Sound is bad directly after power is turned on.	Water droplets may form on the internal lens when the car is parked in a humid place.	Let dry for about 1 hour with the power on.

10. ERROR DISPLAYS

- To protect the system, this unit has been equipped with self diagnostic functions. If a fault arises, a warning is issued by various error displays. Follow the corrective measures and remove the fault.

Error Display	Corrective Measure
ER2	This error display indicates that a fault has arisen in the mechanism of the source unit (for example, the disc cannot be ejected). → Check the source unit.
ER3	This error display indicates that the pickup focus is off because of a scratched disc or some other factor during source unit play. → Check the compact disc.
ER6	This indicates that the CD's TOC (table of contents) cannot be read, for example because the selected disc is upside-down.

11. SPECIFICATIONS

FM Tuner

Frequency Range: 87.9 MHz to 107.9 MHz
 Usable Sensitivity: 11 dBf
 50 dB Quieting Sensitivity: 17 dBf
 Alternate Channel Selectivity: 75 dB
 Stereo Separation (1 kHz): 35 dB
 Frequency Response (± 3 dB): 30 Hz to 15 kHz

AM Tuner

Frequency Range: 530 kHz to 1,710 kHz
 Usable Sensitivity: 25 μ V

CD Player

System: Compact disc audio system
 Usable Discs: Compact disc
 Frequency Response: 10 Hz to 20 kHz (± 1 dB)
 Signal-to-Noise Ratio: 100 dB (1 kHz) IHF-A
 Dynamic Range: 95 dB (1 kHz)
 Harmonic Distortion: 0.01%

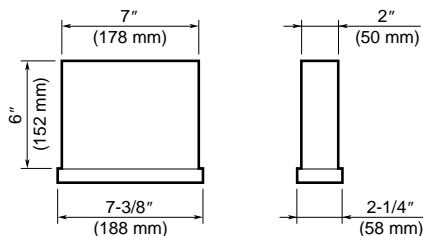
Audio

Maximum Power Output:
 200 W (50 W \times 4 ch)
 Continuous Average Power Output:
 17 W \times 4, into 4 Ω , 20 Hz to 20 kHz, 1%THD
 Bass Control Action (30 Hz): ± 14 dB
 Treble Control Action (10 kHz): ± 14 dB
 Line Output (with A/C 1 kHz, 10 k Ω): 1.7 V

General

Power Supply Voltage: 14.4 V DC (10.8 V to 15.6 V allowable), negative ground
 Current Consumption: Less than 15 A
 Speaker Impedance: 4 Ω (4 Ω to 8 Ω allowable)
 Weight: 2.42 lb. (1.1 kg)
 Dimensions:

7" (178 mm) Width \times 2" (50 mm) Height \times
 6" (152 mm) Depth



Notes:

- Specifications comply with EIA Standards.
- Specifications and design are subject to change without notice for further improvement.
- Please make sure when connecting external power amplifier, that you properly, to the boat chassis, ground the amplifier.
- If this is not done, severe damage to the source unit may happen.